3. Method or apparatus according to ~~one or more of the preceding claims~~ claim 2, characterized in that the temperature is the same on both sides during the temperature-influencing action.

4. Method or apparatus according to ~~one or more of the preceding claims~~ claim 3, characterized in that the temperature is different on the two sides during the temperature-influencing action.

5. Method or apparatus according to ~~one or more of the preceding claims~~ claim 4, characterized in that the gases are hydrogen and nitrogen or helium and argon.

6. Method or apparatus according to ~~one or more of the preceding claims~~ claim 5, characterized by a continuous flow of gas into a gap space ~~(4, 5)~~ between temperature-influencing device ~~(2, 3)~~ and substrate ~~(1)~~.

7. Method or apparatus according to ~~one or more of the preceding claims~~ claim 6, characterized in that the gas flow is controlled by means of mass flow controllers ~~(8, 9; 8', 9')~~.

8. Method or apparatus according to ~~one or more of the preceding claims~~ claim 7, characterized in that the substrate ~~(1)~~ is mounted floating freely on a gas cushion formed by the gas stream associated with the underside of the substrate.

9. Method or apparatus according to ~~one or more of the preceding claims~~ claim 8, characterized in that the substrate ~~(1)~~ is driven in rotation, floating freely, by the gas stream which forms the heat-conducting medium.

10. Method or apparatus according to ~~one or more of the preceding claims~~ claim 9, characterized in that the temperature control involves dissipation of heat or supply of heat.

11. Method or apparatus according to ~~one or more of the preceding claims~~ claim 10, characterized in that the gas composition or gas pressure changes during the heat exchange over the course of time.

12. Method or apparatus according to ~~one or more of the preceding claims~~ claim 11, characterized in that the mass flow of the thermally conducting medium into the gap spaces ~~(4, 5)~~ is so slight that the quantity of heat which is supplied or dissipated via the gas mass flow is significantly less than the heat which is dissipated or supplied via heat conduction.